

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Castration-resistant prostate cancer (CRPC)	MEK	<p>Human tissue studies suggest a combination of Src and MEK family inhibitors could be useful for treating metastatic CRPC. Proteomic analysis of phosphoproteins from 41 CRPC metastases in 17 patients identified patterns of phosphorylation across multiple metastatic lesions from individual patients. In a subset of 16 metastatic lesions, kinase activation predicted sensitivity to combined Src and MEK family inhibition in about 69% of patients. Next steps could include clinical testing of a combination of Src and MEK inhibitors.</p> <p>GlaxoSmithKline plc and Japan Tobacco Inc. market the MAP kinase kinase 1 (MAP2K1; MEK1) and MEK2 (MAP2K2) inhibitor Mekinist trametinib (GSK1120212) for melanoma.</p> <p>At least six other MEK inhibitors are in Phase II or Phase III testing for various cancers.</p> <p>Bristol-Myers Squibb Co. and Otsuka Pharmaceutical Co. Ltd.'s Sprycel dasatinib and Pfizer Inc.'s Bosulif bosutinib, which inhibit Src as well as BCR-ABL tyrosine kinase, are marketed for hematological malignancies.</p> <p>At least four other kinase inhibitors targeting Src are in Phase I and Phase II testing for various cancers.</p> <p>SciBX 7(3); doi:10.1038/scibx.2014.82 Published online Jan. 23, 2014</p>	Patent and licensing status undisclosed	<p>Drake, J.M. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Nov. 18, 2013; doi:10.1073/pnas.1319948110</p> <p>Contact: Owen N. Witte, University of California, Los Angeles, Calif. e-mail: owenwitte@mednet.ucla.edu</p>